## Release notes for ENDF/B Development e-045\_Rh\_000 evaluation



October 13, 2016

## • fudge-4.0 Warnings:

1. Mislabled emitted particle Reading ENDF file: ../e-045\_Rh\_000.endf (Error # 0): ZAP messed up

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0

2. FIXME: Generic fudge unimplemented message reaction label 1: e- + Rh + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)

WARNING: Checking not yet implemented for energyLoss type data

3. FIXME: Generic fudge unimplemented message reaction label 2: e- + Rh [excitation] / Product: e- (Error # 0): Generic unimp (c)

WARNING: Checking not yet implemented for energyLoss type data

## • fudge-4.0 Errors:

1. Calculated and tabulated thresholds don't agree reaction label 0: e- + Rh [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

2. Calculated and tabulated thresholds don't agree reaction label 1: e- + Rh + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

3. Calculated and tabulated thresholds don't agree reaction label 2: e- + Rh [excitation] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

4. Calculated and tabulated thresholds don't agree reaction label 3: e- + e- + Rh1s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 23191. eV!

5. Calculated and tabulated thresholds don't agree reaction label 4: e- + e- + Rh2s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3391.2 eV!

6. Calculated and tabulated thresholds don't agree reaction label 5: e- + e- + Rh2p1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3151.5 eV!

7. Calculated and tabulated thresholds don't agree reaction label 6: e- + e- + Rh2p3/2 / Cross section: (Error # 0): Threshold mismatch

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WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3004.5 eV!
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- 8. Calculated and tabulated thresholds don't agree reaction label 7: e- + e- + Rh3s1/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 615.95 eV!
- 9. Calculated and tabulated thresholds don't agree reaction label 8:  $e^- + e^- + Rh3p1/2$  / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 520.15 eV!
- 10. Calculated and tabulated thresholds don't agree reaction label 9: e- + e- + Rh3p3/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 494.66 eV!
- 11. Calculated and tabulated thresholds don't agree reaction label 10: e- + e- + Rh3d3/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 323.03 eV!
- 12. Calculated and tabulated thresholds don't agree reaction label 11: e- + e- + Rh3d5/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 317.96 eV!
- 13. Calculated and tabulated thresholds don't agree reaction label 12:  $e^- + e^- + Rh4s1/2$  / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 88.52 eV!
- 14. Calculated and tabulated thresholds don't agree reaction label 13: e- + e- + Rh4p1/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 58.84 eV!
- 15. Calculated and tabulated thresholds don't agree reaction label 14: e- + e- + Rh4p3/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 54.78 eV!
- 16. Calculated and tabulated thresholds don't agree reaction label 15: e- + e- + Rh4d3/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10.24 eV!
- 17. Calculated and tabulated thresholds don't agree reaction label 16: e- + e- + Rh4d5/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 9.81 eV!
- 18. Calculated and tabulated thresholds don't agree reaction label 17: e- + e- + Rh5s1/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 6.56 eV!

## • xsectplotter Warnings:

 $\begin{array}{ccc} 1. & {\rm Mislabled~emitted~particle} \\ & \textit{Error:~ZAP~messed~up} \end{array}$ 

 ${\tt stderr} \ {\tt while} \ {\tt processing} \ {\tt crossSection}$ 

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0  $\dots$  [2 more lines]